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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,883	01/22/2002	Carlota Vinals Y De Bassols	BC45224	6044

20462 7590 09/20/2004

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CORPORATE INTELLECTUAL PROPERTY-US, UW2220
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EXAMINER

YAEN, CHRISTOPHER H

ART UNIT	PAPER NUMBER
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1642

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/914,883	Applicant(s) Y DE BASSOLS, CARLOTA VINALS	
	Examiner Christopher H Yaen	Art Unit 1642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 17-45 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Sequence Alignment - exhibit A</u> |

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DETAILED ACTION

RE: Vinals-Bassols C.

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 17-19 and 21-23, drawn to an isolated polypeptide selected from the group consisting of (a) an amino acid which has at least 90% identity to SEQ ID No: 2; (b) an immunogenic fragment of an amino acid sequence of (a), wherein the fragment is at least 90% identical to SEQ ID No: 2; (c) an immunogenic fragment of the amino acid of (a) that matches an aligned segment of SEQ ID No: 2 with no more than five single amino acid substitutions, deletions, or additions.

Group II, claim(s) 17-19 and 21-23, drawn to an isolated polypeptide selected from the group consisting of (a) an amino acid which has at least 90% identity to SEQ ID No: 4; (b) an immunogenic fragment of an amino acid sequence of (a), wherein the fragment is at least 90% identical to SEQ ID No: 4; (c) an immunogenic fragment of the amino acid of (a) that matches an aligned segment of SEQ ID No: 4 with no more than five single amino acid substitutions, deletions, or additions.

Group III, claim(s) 20, drawn to a fusion protein comprising SEQ ID No: 2.

Group IV, claim(s) 20, drawn to a fusion protein comprising SEQ ID No: 4.

Group V, claim(s) 24, drawn to an isolated polypeptide encoded by a first polynucleotide that hybridizes under stringent conditions to a second polynucleotide which encodes the polypeptide of SEQ ID No: 2, wherein the polypeptide induces an immune response that recognizes a polypeptide having SEQ ID No: 2.

Group VI, claim(s) 24, drawn to an isolated polypeptide encoded by a first polynucleotide that hybridizes under stringent conditions to a second polynucleotide which encodes the polypeptide of SEQ ID No: 4, wherein the polypeptide induces an immune response that recognizes a polypeptide having SEQ ID No: 4.

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Group VII, claim(s) 25-28, drawn to an isolated polynucleotide encoding the polypeptide of group I, and expression vector comprising the said polynucleotide, a host cell transformed with the said expression vector, and a method of producing a polypeptide comprising the culturing of the said host cell transformed with the said expression vector.

Group VIII, claim(s) 29, drawn to an immunogenic composition comprising an isolated polynucleotide or expression vector of group VII.

Group IX, claim(s) 30, drawn to a live immunogenic composition comprising an isolated polynucleotide or expression vector of group VII comprised within a microorganism.

Group X, claim(s) 31-35, drawn to an isolated polynucleotide comprising a polynucleotide of sequence or full complement thereof of SEQ ID No: 1 minus any terminal sequence, an expression vector comprising the polynucleotide which codes for SEQ ID No: 2, a host cell transformed with the polynucleotide, and a method of culturing the host cell.

Group XI, claim(s) 31-35, drawn to an isolated polynucleotide comprising a polynucleotide of sequence or full complement thereof of SEQ ID No: 3 minus any terminal sequence, an expression vector comprising the polynucleotide which codes for SEQ ID No: 4, a host cell transformed with the polynucleotide, and a method of culturing the host cell.

Group XII, claim(s) 36-39, drawn to an immunogenic composition comprising the polypeptide of group I.

Group XIII, claim(s) 40, drawn to a method of inducing an immune response comprising the administration of the polypeptide of group I.

Group XIV, claim(s) 41, drawn to a method of screening a compound that stimulates or inhibits the function of the polypeptide of group I.

Group XV, claim(s) 42-43, drawn to a method for the treatment of a subject by immunoprophylaxis or therapy comprising the in vitro induction of immune responses to a polypeptide of group I, comprising the administration of immune cells that have been incubated with the polypeptide for the treatment of the disease

Group XVI, claim(s) 44-45, drawn to a process for diagnosing a disease or susceptibility to a disease in a subject related to the expression or activity of the polypeptide of group I comprising the analysis of the presence or amount of the said polypeptide in the sample.

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2. The inventions listed as Groups I-XVI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

3. The technical feature linking the inventions of group I-XVI appears to be the polypeptides of SEQ ID No: 2 or 4 as claimed in claim 1. However, Pawson *et al* (US Patent 6,218,356) appears to teach a protein that is at least 90% identical to that claimed in claim 1. Pawson *et al* teach a protein (SEQ ID No: 2) that is 98.9% identical (see sequence alignment). Therefore the technical feature linking the inventions of group I-XVI do not constitute a special technical feature as defined by PCT Rule 13.2 as it does not define a contribution over the prior art.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher H Yaen whose telephone number is 571-272-0838. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Siew can be reached on 571-272-0787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Yaen
Art Unit 1642
September 7, 2004

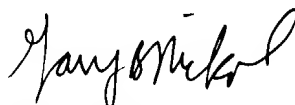

GARY NICKOL
PRIMARY EXAMINER

Exhibit A

RESULT 1
US-08-542-635-2
Sequence 2, Application US/08542635
Patent No. 6218356
GENERAL INFORMATION:
APPLICANT: Pawsen, Anthony
APPLICANT: Henkemeyer, Mark
APPLICANT: Letwin, Kenneth
TITLE OF INVENTION: NOVEL NEURAL RECEPTOR
TITLE OF INVENTION: TYROSINE KINASE
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSER: Bereskin & Parr
STREET: 40 King Street West, Box 401
CITY: Toronto

STATE: Ontario
COUNTRY: Canada
ZIP: M5H 3Y2
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/542.635
FILING DATE:
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: McDiarmid, Shona S.
REGISTRATION NUMBER: 38,798
REFERENCE/DOCKET NUMBER: 3153-162
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 364-7311
TELEFAX: (416) 361-1398
TELEX: 06-23115
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 994 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: Mus musculus
DEVELOPMENTAL STAGE: Embryo
IMMEDIATE SOURCE:
LIBRARY: lambda gt10 cDNA library
CLONE: Combined pNURACE A2 and K2 and cDNA clones
POSITION IN GENOME:
CHROMOSOME/SEGMENT: Distal end of chromosome 4
MAP POSITION: near the and-1 mutation
US-08-542-635-2

Query Match 98.9%; Score 5130; DB 3; Length 994;
Best Local Similarity 99.5%; Pred. No. 0;
Matches 972; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY	10	LLLLPLAAVEETLMDSTATAELGMMVHPSPSGMEVSGYDENMNTIRTYQVCNVFESSQ	69
DB	18	LLLLPLAAVEETLMDSTATAELGMMVHPSPSGMEVSGYDENMNTIRTYQVCNVFESSQ	77
QY	70	NNMLRTKFIIRRGARHIVEMKESVPDCSSISVPSCKETPNLYYEADFDGATKTFPN	129
DB	78	NNMLRTKFIIRRGARHIVEMKESVPDCSSISVPSCKETPNLYYEADFDGATKTFPN	137
QY	130	MMENPMVKVDTTIADESFSQVDLGGKVMKINTEVRSFGVPSRSGFYLAFODYGGCMSTLA	189
DB	138	MMENPMVKVDTTIADESFSQVDLGGKVMKINTEVRSFGVPSRSGFYLAFODYGGCMSTLA	197
QY	190	VAVEFKPCRTIIONGAIFOETISGAESTSLVARSGCIANAEVDVPIKLYCNGDEEWLV	249
DB	198	VAVEFKPCRTIIONGAIFOETISGAESTSLVARSGCIANAEVDVPIKLYCNGDEEWLV	257
QY	250	PIGRCMCKAGFEAVNGTVCRCGPGSTFRKANGDGAACHCPINSRTTSGAINTVCRCNG	309
DB	258	PIGRCMCKAGFEAVNGTVCRCGPGSTFRKANGDGAACHCPINSRTTSGAINTVCRCNG	317
QY	310	YRADIDPLDMPCTTIPSAPOAVISSVNETSLMLEWTTPRDSGGRDLVYNIICKSGSGR	369
DB	318	YRADIDPLDMPCTTIPSAPOAVISSVNETSLMLEWTTPRDSGGRDLVYNIICKSGSGR	377
QY	370	GACRCGNGVYARROGLTEPRYISDILAHQYTFEIIQAVNGVTDSPSPQASVNI	429
DB	378	GACRCGNGVYARROGLTEPRYISDILAHQYTFEIIQAVNGVTDSPSPQASVNI	437
QY	430	TTNOAPASAVSIMHOVSRVDSITLSWSOPQDPNGVILDYLOYTEKELSEYNATAIKSP	489
DB	438	TTNOAPASAVSIMHOVSRVDSITLSWSOPQDPNGVILDYLOYTEKELSEYNATAIKSP	497

Mon Aug 30 08:48:58 2004

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QY 490 TNTVTVQGLKAGAIYVFOVRARTVAGYGRYSGKMYFQTMTEAEYQTSIQEKLPLIIGSSA 549
Db 498 TNTVTVQGLKAGAIYVFOVRARTVAGYGRYSGKMYFQTMTEAEYQTSIQEKLPLIIGSSA 557
QY 550 AGLVFLIAVVVIAIVCNRRGFERADSEYTDKLGHYTSGHMTPGMKIYIDPPTYEDPNEAV 609
Db 558 AGLVFLIAVVVIAIVCNRRGFERADSEYTDKLGHYTSGHMTPGMKIYIDPPTYEDPNEAV 617
QY 610 REFAKEIDISCVKIEQVIGAGEFGEVCSGHLKLPKREIFVAIKTLKSGYTEKQRRDFLS 669
Db 618 REFAKEIDISCVKIEQVIGAGEFGEVCSGHLKLPKREIFVAIKTLKSGYTEKQRRDFLS 677
QY 670 EASIMGQFDHPNVHLEGVVTSTPVMITTEFMENGSLDSFLRQNDGQFTVIQLVGMLRG 729
Db 678 EASIMGQFDHPNVHLEGVVTSTPVMITTEFMENGSLDSFLRQNDGQFTVIQLVGMLRG 737
QY 730 IAAGMKYLADMNYVHRDLAARNILVNSNLVCKVSDFGLSRFLEDDTSDPTYTSALGGKIP 789
Db 738 IAAGMKYLADMNYVHRDLAARNILVNSNLVCKVSDFGLSRFLEDDTSDPTYTSALGGKIP 797
QY 790 IRWTAPEAIQYRKFTSASDVMSYGIVMWEVMSYGERPYWDMTNQDVINAIEQDYRLPPPM 849
Db 798 IRWTAPEAIQYRKFTSASDVMSYGIVMWEVMSYGERPYWDMTNQDVINAIEQDYRLPPPM 857
QY 850 DCPSALHQLMLDCWQKDRNHRPKFGQIVNTLDKMI RNPNLSLKAMAPLSSGINLPLLDRTI 909
Db 858 DCPSALHQLMLDCWQKDRNHRPKFGQIVNTLDKMI RNPNLSLKAMAPLSSGINLPLLDRTI 917
QY 910 PDYTSFNTVDEWLEAIKMGQYKESFANAGFTSFDVVSQMMEDILRLGVTLAGHQKKILN 969
Db 918 PDYTSFNTVDEWLEAIKMGQYKESFANAGFTSFDVVSQMMEDILRLGVTLAGHQKKILN 977
QY 970 SIQVMRAQMNIQSVEV 986
Db 978 SIQVMRAQMNIQSVEV 994